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## REMARKS

Claims 1-3, 5-13, 15-34, and 37-47 remain in this application. Claims 1, 12, 22, 33, 44, and 47 are amended. Claims 14, 24, and 35 are cancelled. Claims 4, 25 and 36 have been previously cancelled.

Applicant thanks the Examiner for the detailed study of the application and acceptance of the 131 Declaration. Applicant has reviewed again the cited U.S. Patent No. 6,192,109 to Amrany et al. (hereinafter "Amrany") used in combination with U.S. Patent No. 5,623,543 to Cook to reject claims 1-3, 5-7, 12-17, 22, 26, 27, 33, 37-39 and 44. Applicant has also reviewed U.S. Patent No. 6,426,961 to Nimmagadda used in combination with Amrany and Cook to reject claims 11, 21, 32, 43 and 47.

At the outset, independent system claims 22 and 33 have been amended to recite that the remote test unit obtains local loop line data and is part of the bandwidth analysis system. Dependent claims 24 and 35 directed to this allowable subject matter have been cancelled.

As to the rejected independent method claims, they have been amended to recite that the qualifying occurs by comparing the results of local loop testing for thresholds specified by giving DSL technologies. As an example, this can include testing for the presence or absence of load coils, impulse noise counts and ringer counts as indicated in the allowable claim 8.

Applicant notes that nowhere does Amrany, Cook or Nimmagadda disclose either singularly or in combination the qualifying of the local loop by comparing the results of local loop testing with the thresholds specified by given DSL

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technologies. At the most, Amrany suggests the determination of what transmit signal power will not result in unacceptable signal distortion. This occurs by transmitting single- or multi-tone test signals and monitoring any distortion intermodulation products. In Amrany, the test signal level is initially set to a value that is unlikely to cause distortion or intermodulation products. This signal level is increased in steps, for example, by one decibel level. The received signal is examined for the presence of distortion and intermodulation products. When the distortional intermodulation products exceed a certain level, the transmit power signal is reduced. As a result, the communication is transmitted at the highest data rate supported by the transmission line. At most, Amrany suggests reducing power when an unaccceptable amount of distortion occurs. In Amrany, there is no comparison of test results in the local loop to thresholds specified by given DSL technologies as in the present claimed invention.

Cook determines the impedance or resistance of a transmission line, for example, a Plain Old Telephone Service (POTS) line, but nowhere suggests any comparison of results of local loop testing with any thresholds specified by given DSL technologies.

Nimmagadda is directed to selecting a mode of operation of a service in light of another service in an ADSL system. Nimmagadda selects a mode from a list, for example, based on the impact of service performance in light of concurrent use of another service. Nimmagadda alone or in combination does not disclose or suggest the present claimed invention.

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Also, Applicant notes that Amrany does not disclose any modeling of the local loop. Cook discloses an expression for determining the characteristic impedance of a transmission line such as POTS. Thus, the combination of Amrany, Cook and/or Nimmagadda is even further removed and does not suggest the claimed invention of qualifying the local loop for a particular DSL technology by comparing the results of local loop testing to the thresholds specified by given DSL technologies, and quantifying the local loop by modeling the local loop, calculating the signal-to-noise ratio and calculating the data rates of the local loop for a particular DSL technology.

Applicant contends that the present case is in condition for allowance and respectfully requests that the Examiner issue a Notice of Allowance and Issue Fee Due.

If the Examiner has any questions or suggestions for placing this case in condition for allowance, the undersigned attorney would appreciate a telephone call.

Respectfully submitted,

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## CERTIFICATE OF MAILING

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